

**Amendments to the Specification:**

Please replace the paragraph on page 11, lines 1-8, with the following amended paragraph:

The third level-2 controller 54c sends signals to components that function to transport the specimen rack 40, by sending signals to various arms that move the rack along a path. More specifically, the third level-2 controller 54c sends signals to a front arm stepper motor 76a, a rear arm stepper motor 76b, one or more DC motors 78, to move the specimen rack 40. Sampling from the tubes on the sample platform 42 (shown in FIG. 3) is performed by a pump-driven fluidic subsystem. Any suitable pump, including a displacement pump of the type described in U.S. Patent Application Serial No. 7,150,607 \_\_\_\_\_ [~~Attorney Docket No. 2102402-914911~~], may be used to drive the sampling process.

**Amendments to the Abstract:**

Please replace the Abstract on page 32 with the following amended paragraph:

The invention is a state machine having a host controller that controls a level-1 controller, wherein the level-1 controller controls the level-2 controller. The level-2 controller controls system component controllers, which in turn control system components to execute a process segment. For example, the machine includes a host controller that selects a set of states to be executed, a level-1 controller that activates the set of states in a predetermined order, wherein each state includes commands, and a level-2 controller that controls system components according to the commands. A method of executing a process includes identifying a set of states to be executed, issuing state commands that need to be issued to execute the current state in the set of states, and activating a next state only after all expected status reports have been received for the current state.

~~The invention also includes a method of executing a process by identifying a set of states to be executed, issuing state commands that need to be issued to execute the current state in the~~

Appl. No.: 10/716,842  
Docket No.: 351918-914971 (new) (old: 2102402-914971)  
Response to Office Action of October 18, 2006

~~set of states, and activating a next state only after all expected status reports have been received  
for the current state.~~